

## **CLAIMS**

What is claimed:

1. A system providing one or more users with a unique private personal network formed from contacts with one or more entities known or linked directly or indirectly to the user, characterised in that said unique private personal network provides respective interrelationship context information associated between at least two entities and/or between an entity and the user.
2. The system as claimed in claim 1 wherein entities includes any individual, family, personal or organised network, organisation, club, society, company, partnership, religion, or entity that exists as a particular and discrete unit.
3. The system as claimed in claim 1, wherein said system includes for each entity one or more entity attributes, including at least one identifying characteristic.
4. The system as claimed in claim 3, wherein the interrelationship context information includes one or more entity attributes.
5. The system as claimed in claim 4, wherein said entity attributes include information regarding personal details, factors or interests; friends; relations; school alumni; employment factors; business colleagues; professional acquaintances; sexual preferences, persuasions, or proclivities; sporting interests; entertainment, artistic, creative or leisure interests; travel interests, commercial, religious, political, theological or ideological belief or opinions; academic, scientific, or engineering disciplines; humanitarian, social, security/military or economic fields and any combination of same.

6. The system as claimed in claim 1, wherein said system includes;
  - at least one host computer processor connectable to at least one network,
  - a database accessible over said network, and
  - a plurality of data input devices connectable to said network .
- 5 7. The system as claimed in claim 1, wherein said interrelationship context information includes a connection factor indicative of the separation between an entity and the user.
8. The system as claimed in claim 1, wherein said interrelationship context information includes a connection factor indicative of the separation between entities in said unique private personal network.
- 10 9. The system as claimed in claim 6, wherein said entity attributes are stored in an entity data record stored in said database.
10. The system as claimed in claim 3, wherein said organised network entities may be formed by groups of individual entities possessing one or more common entity attributes.
- 15 11. The system as claimed in claim 3, wherein access to the interrelationship context information between the user and said entities is restricted.
12. The system as claimed in claim 11, wherein said restricted access is restricted according to the existence of specified entity attributes.
13. The system as claimed in claim 11, wherein said restricted access is defined by the user.

14. The system as claimed in claim 3, wherein said entities, including the user, may be considered as “nodes” in said network.
15. The system as claimed in claim 14, wherein the or each of the users or entities in each said unique private personal network are represented as nodes, each node being at the  
5 origin of an individual personal network consisting of the user and a variable number of additional nodes.
16. The system as claimed in claim 14, wherein each node includes at least one identifying characteristics of the corresponding entity represented.
17. The system as claimed in claim 3, wherein said identifying characteristics includes the  
10 entity’s name.
18. The system as claimed in claim 3, wherein said identifying characteristic includes a means of contacting the entity.
19. The system as claimed in claim 18, wherein said means of contacting the entity included an e-mail address; telephone and/or facsimile number; postal address and/or any  
15 communication means capable of individually communicating with the entity or any combination of such means.
20. The system as claimed in claim 3, wherein said identifying characteristics may include supplementary attributes of said user or entity.

21. The system as claimed in claim 14, wherein a node becomes part of the network system by independent registration or by accepting an invitation from a registered node.
22. The system as claimed in claim 21, wherein nodes agreeing to inclusion in a user's unique private personal network are defined to be direct contacts, or "directly connected".
23. The system as claimed in claim 14, wherein nodes included in the database system indirectly or unconnected to a user may become directly connected by mutual agreement.
24. The system as claimed in claim 23, wherein said nodes become directly connected by one node sending an invitation and the other accepting.
25. The system as claimed in claim 14, wherein where two nodes are said to be linked through any number of intermediate nodes are defined as being "connected".
26. The system as claimed in claim 14, wherein where two nodes exist independently in the database system or a unique private personal network with no intermediate nodes connecting them, they are defined as being "disconnected".
27. The system as claimed in claim 14, wherein said interrelationship context information includes a connection factor indicative of the separation between an entity and the user, said connection factor incorporating a connection path length between two nodes, given by the number of connections in a chain of nodes separating two nodes.

28. The system as claimed in claim 27, wherein said connection factor incorporates the degree of separation between two nodes and is equal to the shortest connection path length of all the available connection paths between the nodes, wherein a node that is directly connected to another node is a "direct contact" giving a "1<sup>st</sup> degree contact," and  
5 has a connection path length of one, two nodes connected via one intermediate node are "2<sup>nd</sup> degree contacts," and have a connection path length of two, and wherein any two nodes whose shortest connection path is via "N-1" nodes, with a path length of "N" have an "N<sup>th</sup>" degree contact, where "N" is an integer.
29. The system as claimed in claim 14, wherein an application or communication is initiated  
10 by one or more nodes, and responded to by one or more further nodes.
30. The system as claimed in claim 29, wherein said users may search for other nodes that desire to conduct an application or communication, optionally selecting to be notified of future such events.
31. The system as claimed in claim 28, wherein said system is configured to allow a user to  
15 apply a selective interaction with other nodes for a predetermined activity by controlling the value of N<sup>th</sup> degrees contact of nodes to be included, where N is a variable determined by the user.
32. The system as claimed in claim 31, wherein said predetermined activity includes instigating, continuing, terminating or responding to an application, search,  
20 communication, and/or selective information distribution.

33. The system as claimed in claim 32, wherein a user engaged in one or more said predetermined activities may specify the action to apply to

- all degrees of contact in the user's unique private personal network," at any connection path length, or

5       - the entire system network of all nodes, including those who are not connected to the user.

34. The system as claimed in claim 29, wherein said applications include consumer decisions, buying, selling, trading loaning; finding flatmates/roommates, tenants; organising activities and events, recommendations/opinions including those related to  
10       films, plays, books, employment, services, tradesmen, accommodation, restaurants and the like, comparison and explorations of common interests, e.g. horse riding, snowboarding, etc; sharing peer-to-peer personal or business creative work or content, e.g. photos, art-work, literature, music; managing a club or society; locating/supplying/"blacklisting" providers of goods or services; business or  
15       technological advice unsuitable for publication; recruitment, job-seeking; estate agents; venture capital; collaborative ventures; referrals; police/security information gathering/informants; event manager; address book manager; search engines; headhunting; book mark service; spam filtering; car sharing; sales leads; market entry advice; real-estate; sharing files; company knowledge management; medical advice;  
20       travel organiser, lending/borrowing; house-sitting; baby-sitting; classified advertisements; finding musicians.

35. The system as claimed in claim 29, wherein said system permits conducting applications with networks outside the system network.

36. The system as claimed in claim 16, wherein access to at least a portion of the said identifying characteristics of each node is restricted.
37. The system as claimed in claim 22, wherein each node may only access the name and contact details of direct contacts in its unique private personal network.
- 5 38. The system as claimed in claim 28, wherein, a node can only see the number or partial name of nodes connected within each of the user's N degrees contacts of greater than the second degree of separation.
39. The system as claimed in claim 28, wherein communication between entities may be restricted to contact solely via the system according to the degree of separation between  
10 the entities.
40. The system as claimed in claim 37, wherein only a user's direct contact(s) are provided with the user's contact details enabling communication independently of the system.
41. The system as claimed in claim 28, wherein said system provides a filter for any form of electronic communication by prioritising communications from entities in the user's  
15 unique private personal network within a defined degree of separation, over other communications.
42. The system as claimed in claim 29, wherein a user has a designated role in an application, or a said predetermined activity.
43. The system as claimed in claim 42, wherein said designated role is chosen by the user.

44. The system as claimed in claim 42, wherein said designated role is assigned by the system or another entity.
45. The system as claimed in claim 42, wherein said roles include at least one of provider, participant, or facilitator roles.
- 5 46. The system as claimed in claim 28, wherein a user may selectively control access to the identifying characteristics of itself and or, with consent, any nodes within a permitted degree of separation from the user.
47. The system as claimed in claim 46, wherein said selective control is variable according to the predetermined activity being undertaken.
- 10 48. The system as claimed in claim 47, wherein said system automatically updates changes in the identifying characteristics, contact details, entity attributes, and any other data associated with and/or inputted by a node and records same in associated with each entity/node.
- 15 49. The system as claimed in claim 48, wherein said system automatically maintains connectivity between nodes following changes in a nodes contact details and/or the integrity of any aspect of a predetermined activity dependant on the contents of said entity data records of the nodes involved by virtue of said automatic updating.
- 20 50. The system as claimed in claim 49, wherein the system auto-synchronises the contact details of entities accessible to the user with electric contact details stored in an electronic or data storage media connected by the user to the system.
51. The system as claimed in claim 31, wherein after a user has formed its own unique private personal network, the degree of separation of the nodes to be involved in a



predetermined activity may be varied without reconstructing the unique private personal network for each activity.

52. The system as claimed in claim 14, further including a means of visually displaying the interconnections between the nodes.

5 53. The system as claimed in claim 52, wherein a user's unique private network may be visually represented on an electronic display in one or more of the following forms, including:

- a solid line indicating entities who have joined or have consented to join the user's unique private network;
- 10 - dotted lines indicating entities who have been invited but they have not joined the user's unique private network;
- different symbols to differentiate between nodes representing different types of entities;
- different symbols to depict nodes representing entities who are individuals and  
15 those representing organisations;
- symbols at least partially resembling people to depict nodes representing actual individuals;
- different symbols, colours, animations and/or sounds for a node to indicate the existence of defined information of interest including a particular predetermined

activity, identifying characteristic, entity attribute, or other data recorded in a nodes data record;

- 5       - different colours/symbols for different roles in a specific application, such as in an employment application for employers and job seekers and/or the existence of a link to details of a job vacancy;
- displaying further defined information of interest or permitted actions when positioning a cursor or visual indicator over a node depending, and varying the information displayed depending on the user's degree of separation from the node;
- 10       - nodes representing a person or an organised network also showing a numerical indication of the number of direct contacts associated with the node;
- a indicative rather than literal indication of the number of links to a node if number exceeds a defined value, with a numerical value showing the actual number of connections;
- 15       - user customisable representations for nodes, including images, photographs and figures;
- different visual appearance of a node symbol to indicate the status of an activity, e.g. a higher intensity symbol indicating a successful linking of a job seeker with a vacancy.

54. The system as claimed in claim 37, wherein a user is provided with searchable access to  
20       sources including said data records, identifying characteristics, contact details, entity attributes, and said predetermined activities.

55. The system as claimed in claim 54, wherein said searchable sources includes supplementary attributes detailing specific details of the entity relevant to a particular

application or activity.

56. The system as claimed in claim 54, wherein said a user may prohibit the recordal of any or all details stored or potentially stored in their respective entity data record from being searchable and/or stored on said system.

5 57. The system as claimed in claim 54, wherein said users are provided with searchable access to the system to search for entities matching a predetermined profile composed of user-defined entity attributes, identifying characteristics, supplementary attributes, predetermined activities or any combination of same.

10 58. The system as claimed in claim 57, wherein said system is capable of contacting and/or conveying information to entities matching a said predetermined profile.

59. The system as claimed in claim 57, wherein said database is searchable for entities matching a predetermined profile.

60. The system as claimed in claim 54, wherein said searchable access is available only to prescribed users.

15 61. The system as claimed in claim 60, wherein said prescribed users provided with searchable access of the database are determined by a defined eligibility criteria.

62. The system as claimed in claim 61, wherein said eligibility criteria includes a paying a subscription to said system.

20 63. The system as claimed in claim 61, wherein said eligibility criteria definition may be based on any of the above described entity attributes, identifying characteristic - including said supplementary attributes or combination of same.

64. The system as claimed in claim 61, wherein said eligibility requirement includes

payment for use of the system include a subscription, one-off payment, an on-going time-based payment, be based on the quantity or nature of database search results, be based on the number and type of successful outcomes from use of the services or any combination of same.

- 5    65. The system as claimed in claim 64, wherein payment may be related to the success of a predetermined activity undertaken by the user.
66. The system as claimed in claim 42, wherein a reward is provided to an entity according to their success in fulfilling their designated role in a predetermined activity.
67. The system as claimed in claim 45, wherein a reward is given to a facilitator for aiding in  
10    linking a provider with a participant.
68. The system as claimed in claim 67, wherein a reward recipient is chosen by the provider or facilitator entity.
69. The system as claimed in claim 20, wherein said individual users may choose to optionally restrict access to part or all of their stored data in their entity data record to  
15    other users with particular identifying characteristics, supplementary attributes and/or entity attributes.
70. The system as claimed in claim 1, wherein said system allows a user access to the system across a network, including the Internet, an intranet; wide and local area networks; a telephone or pager networks, telephone-based text-messaging or facsimiles; automated  
20    mailserver systems; power transmission networks, wireless networks; networks comprised of other telecommunication links: postal or courier services and the like.
71. The system as claimed in claim 61, wherein said searchable access to an entity's data record may be restricted by the entity to other said prescribed entities.

72. The system as claimed in claim 1, wherein said system includes;

- at least one host computer processor connectable to one or more network(s),
- a database accessible over said network(s),
- a plurality of data input devices connectable to said network(s),
- 5       – wherein said system is capable of forming said unique private personal network for each of one or more users by receiving input from the said user including at least one identifying characteristic of the user and of one or more chosen entities known to said user,
- recording said identifying characteristic of each entity including the user to form  
10       one or more corresponding entity data records in said database;
- notifying the or each chosen entity of their recordal on said system and requesting input of at least one identifying characteristic of one or more further entities known to the or each said chosen entity;
- recording the identifying characteristic of each further entity inputted by the or  
15       each said chosen entity to form further corresponding entity data records;
- repeating the above steps of successive notification of further entities and recordal of the identifying characteristic of each further entity chosen as further entity data records;
- providing searchable access to at least part of the entity data records stored in said  
20       database.

73. The system as claimed in claim 72, wherein said data input devices are computer terminals, PDAs, fixed and mobile telephones, laptops, notebooks, any other portable

personal computing device connectable to said network.

74. The system as claimed in claim 72, wherein said data input devices may provide webpage, -mail, text message, DTMF tone voice or video access to the said host computer or between entities and/or web-browsing access to said host computer via a dedicated web-site interface.

75. The system as claimed in claim 72, wherein said entities stored on said database may be periodically provided with indicative information relating to additional new entities with an entity attribute matching that recorded in the entities user data record, which have been inputted to the system since the entities' last system access and/or said automated periodic update.

76. The system as claimed in claim 75, wherein said indicative information may provide a simple numerical indication of new recorded entities, new or altered identifying characteristics or entity attributes of existing stored entities, or alternatively may include at least part of the details contained in the respective entity user data records of the new users.

77. The system as claimed in claim 72, wherein a referral chain formed by the sequence of preceding chosen entities sharing a common predetermined factor leading to the eventual choice of a particular entity for inclusion in the database may be recorded in the entity user data record.

78. The system as claimed in claim 77, wherein anonymous references regarding a particular entity may be requested of one or more entities identified within the corresponding referral chain relating to said particular individual.

79. The system as claimed in claim 72, an entity is prompted for a response to predetermined questions relating to non-sensitive matters of opinion on neutral topics, said responses

being stored as part of the entity data record searchable by said selected users.

80. The system as claimed in claim 29, implemented for a new application by the identification of;

- possible participating entity roles;
- 5      – applicable social rules;
- any specific restrictions or special features related to participating entities; and;
- motivations of participants for different roles.

81. The system as claimed in claim 57, wherein criteria for matching a predetermined profile in a search of said database includes one or more external factors.

10   82. The system as claimed in claim 81, wherein said external factors are included in the criteria for matching a predetermined profile according one or more user defined rules.

83. The system as claimed in claim 3, wherein said system records a user's recommendations regarding consumer items and/or services as part of the user's data record.

15   84. The system as claimed in claim 83, further including a hyperlink connection to a web site of a manufacturer of recommended product.

85. The system as claimed in claim 84, wherein a financial, product or service reward is provided to an entity by a manufacturer according to a predetermined number of hyperlink accesses attributed to the user's recommendation.

20   86. The system as claimed in claim 83, wherein a manufacturer may directly subsidise the company hosting the searchable database system according to the total number of

recommendations, whilst optionally, the individual system users may receive a proportionally discounted subscription to the system.

- 5        87. The system as claimed in claim 83, wherein said service and/or product providers receive a predetermined number of recommendations without charge after which they are invited to pay a fee to be maintained as a searchable term on the database.
88. The system as claimed in claim 83, wherein said system monitors all successful recommendations and provides a discount to the relevant entities.
- 10       89. The system as claimed in claim 31, further including automated dialing via a Public Switched Telephone Network (PSTN) through a web-based function allowing the user to request the telephone network to make a call to two or more entities involved in a predetermined activity and connect them via a bridge in the network.
90. The system as claimed in claim 89, further including a voice mailbox to which a user can redirect existing voice mail subscriptions.
- 15       91. The system as claimed in claim 1, further including Mobile Notification Services to allow the user to optionally and selectively receive alerts, in the form of a Short-Message (SMS), Enhanced SMS (EMS), Multi-Media Message (MMS), plain email, a paging message, or other message format sent to a mobile communication device.
- 20       92. The system as claimed in claim 91, further including Data Application Services enabling users to optionally and selectively initiate or receive data communications related to their unique social network(s) via SMS, EMS, MMS, email, WAP, paging, or other wireless application communication data format.
93. The system as claimed in claim 1, further including Location-Based Services enabling users to utilise the benefit of their unique social network taking account of their physical



location determined by mobile-phone cellsite location, GPS location, manual or menu-driven location selection, or other known position location systems.

94. A method of creating a unique private personal network for a user in a system as claimed in claim 1, including the steps performed by a processor of a data processing and storage system, of:

- receiving input from the said user including at least one identifying characteristic of the user and of one or more chosen entities known to said user;
- recording said identifying characteristic of each entity including the user to form one or more corresponding entity data records in said database;
- notifying the or each chosen entity of their recordal on said system and requesting input of at least one identifying characteristic of one or more further entities known to the or each said chosen entity;
- recording the identifying characteristic of each further entity inputted by the or each said chosen entity to form further corresponding entity data records;
- repeating the above steps of successive notification of further entities and recordal of the identifying characteristic of each further entity chosen as further entity data records;
- providing searchable access to at least part of the entity data records stored in said database.